

(300) is depicted in block diagram format. The lighting fixture (300) includes two components, a processor (316) and a collection of component illumination sources (320), which is depicted in FIG. 2 as an array of light emitting diodes. In one embodiment of the invention, the collection of component illumination sources comprises at least two illumination sources that produce different spectrums of light. The collection of component illumination sources (320) are arranged within said lighting fixture (300) on a mounting (310) in such a way that the light from the different component illumination sources is allowed to mix to produce a resultant spectrum of light which is basically the additive spectrum of the different component illumination sources. In FIG. 2, this is done by placing the component illumination sources (320) in a generally circular area, it could also be done in any other manner as would be understood by one of skill in the art, such as a line of component illumination sources, or another geometric shape of component illumination sources. The term "processor" is used herein to refer to any method or system for processing, for example, those that process in response to a signal or data and/or those that process autonomously. A processor should be understood to encompass microprocessors, microcontrollers, programmable digital signal processors, integrated circuits, computer software, computer hardware, electrical circuits, application specific integrated circuits, programmable logic devices, programmable gate arrays, programmable array logic, personal computers, chips, and any other combination of discrete analog, digital, or programmable components, or other devices capable of providing processing functions.

Please replace the paragraph beginning at line 11 on page 21 with the following rewritten paragraph:

The foregoing embodiments of a lighting fixture (300) will generally reside in one of any number of different housings. Such, housing is, however, not necessary, and the lighting fixture (300) could be used without a housing to still form a lighting fixture. A housing may provide for lensing of the resultant light produced and may provide protection of the lighting fixture (300) and its components. A housing may be included in a lighting fixture as this term is used throughout this document. FIG. 4 shows an exploded view of one embodiment of a lighting fixture of the present invention. The depicted embodiment comprises a substantially cylindrical body section (362), a lighting fixture (364), a conductive sleeve (368), a power module (372), a second conductive sleeve (374), and an enclosure plate (378). It is to be assumed here that the lighting fixture (364) and the power module (372) contain the electrical structure and software of

lighting fixture (300) a different power module and lighting fixture (300) as known to the art, or as described in United States Patent Application Ser. No. 09/215,624 the entire disclosure of which is herein incorporated by reference. Screws (382), (384), (386), (388) allow the entire apparatus to be mechanically connected. Body section (362), conductive sleeves (368) and (374) and enclosure plate (378) are preferably made from a material that conducts heat, such as aluminum. Body section (362) has an emission end (361), a reflective interior portion (not shown) and an illumination end (363). Lighting module (364) is mechanically affixed to said illumination end (363). Said emission end (361) may be open, or, in one embodiment may have affixed thereto a filter (391). Filter (391) may be a clear filter, a diffusing filter, a colored filter, or any other type of filter known to the art. In one embodiment, the filter will be permanently attached to the body section (362), but in other embodiments, the filter could be removably attached. In a still further embodiment, the filter (391), need not be attached to the emission end (361) of body portion (362) but may be inserted anywhere in the direction of light emission from the lighting fixture (364). Lighting fixture (364) may be disk-shaped with two sides. The illumination side (not shown) comprises a plurality of component light sources which produce a predetermined selection of different spectrums of light. The connection side may hold an electrical connector male pin assembly (392). Both the illumination side and the connection side can be coated with aluminum surfaces to better allow the conduction of heat outward from the plurality of component light sources to the body section (362). Likewise, power module (372) is generally disk shaped and may have every available surface covered with aluminum for the same reason. Power module (372) has a connection side holding an electrical connector female pin assembly (394) adapted to fit the pins from assembly (392). Power module (372) has a power terminal side holding a terminal (398) for connection to a source of power such as an AC or DC electrical source. Any standard AC or DC jack may be used, as appropriate.

Please replace the paragraph beginning at line 13 on page 55 with the following rewritten paragraph:

FIG. 29 shows one embodiment of a lighting fixture according to this disclosure which could be used as a replacement fluorescent tube in a housing such as the one in FIG. 28. The lighting fixture may comprise, in one embodiment, a variation on the lighting fixture (5000) in FIGS. 5a and 5b. The lighting fixture can comprise a bottom portion (1101) with a generally rounded underside (1103) and a generally flat connection surface (1105). The lighting fixture

also comprises a top portion (1111) with a generally rounded upper portion (1113) and a generally flat connection surface (1115). The top portion (1111) will generally be comprised of a translucent, transparent, or similar material allowing light transmission and may comprise a filter similar to filter (391). The flat connection surfaces (1105) and (1115) can be placed together to form a generally cylindrical lighting fixture and can be attached by any method known in the art. Between top portion (1111) and bottom portion (1101) is a lighting fixture (1150) which comprises a generally rectangular mounting (1153) and a strip of at least one component illumination source such as an LED (1155). This construction is by no means necessary and the lighting fixture need not have a housing with it or could have a housing of any type known in the art. Although a single strip is shown, one of skill in the art would understand that multiple strips, or other patterns of arrangement of the illumination sources, could be used. The strips generally have the component LEDs in a sequence that separates the colors of LEDs if there are multiple colors of LEDs but such an arrangement is not required. The lighting fixture will generally have lamp connectors (2504) for connecting the lighting fixture to the existing lamp couplers (2408) (e.g., as shown in Fig. 28). The LED system may also include a control circuit (2510). This circuit may convert the ballast voltage into D.C. for the LED operation. The control circuit (2510) may control the LEDs (1155) with constant D.C. voltage or control circuit (2510) may generate control signals to operate the LEDs. In a preferred embodiment, the control circuit (2510) would include a processor for generating pulse width modulated control signals, or other similar control signals, for the LEDs.

IN THE DRAWINGS

A Request for Approval of Proposed Drawing Corrections is enclosed along with proposed revisions to Figure 2 in which the changes are shown in red ink.

IN THE CLAIMS

Please cancel claims 2-15, 20, 23, 24 and 34-65 without prejudice or disclaimer as to the subject matter underlying these claims.

Please substitute claims 1, 16, 17, 21, 22, 25, 31-33, 66, 74-76, 79, 80 and 82-85 below for the pending claims with the same numbers. A prior version of these claims with all changes made by the current amendment shown using bracketing and underlining is attached hereto, and is captioned “Marked-Up Claims”.